



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,450	06/21/2001	Shi-Chang Wooh	MIT-117J	5772

7590 10/08/2002  
Iandiorio & Teska  
260 Bear Hill Road  
Waltham, MA 02451-1018

EXAMINER

HORTON, YVONNE MICHELE

ART UNIT	PAPER NUMBER
----------	--------------

3635

DATE MAILED: 10/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/886,450

Applicant(s)  
SHI-CHANG WOOH ET AL.

Examiner  
YVONNE M. HORTON

Art Unit  
3635



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 21, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Aug 27, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 3635

## DETAILED ACTION

### *Specification*

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### *Claim Objections*

2. Claim 1 is objected to because of the following informalities: In claim 1, line 3, "a" should be deleted. Appropriate correction is required.

### *Double Patenting*

3. Claim 13 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 11. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

*Repeal with notes on 1st.*

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to

Art Unit: 3635

which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear from the specification how the enclosure cells are "suspended" if the tension members are connected at the tops and bottoms thereof to hold the enclosure cells in place through tension. Clarification is required

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1,5,7,9,10,12,14,15,17 and 18 are rejected under 35 U.S.C. 102(b) as being

anticipated by US Patent #3,791,081 to FELCIAI. FELCIAI discloses a building construction

including a support structure <sup>(5a)</sup> ~~(2,21)~~ <sup>formed by</sup> including a support beams(28), at least one enclosure cell

~~(1,20)~~ <sup>1,13,14,20</sup> and at least one tension member (7,11,22,25). In reference to claim 5, the support beam

(28) is linear. Regarding claim 7, there are a plurality of support beams (28) see figure 5. In

reference to claim 9, the support beams (28) include cable tension members (7,11,22,25).

Regarding claim 10, there are a plurality of cable members (7,11,22,25) suspending the enclosure

Art Unit: 3635

cells (1,20). In reference to claim 12, the enclosure cell (1,20) includes a wall (9) and a floor (8).

In reference to claim 14, FELCIAI discloses the method of using tension support members including the steps of providing a support structure by installing a support beam (28), providing at least one enclosure cell (1,20), and suspending the enclosure cell (1,20) with a tension member (7,11,22,25) from the support beam (28). Regarding claim 15, the method steps include installing additional enclosure cells. In reference to claims 17 and 18, there are at least two support beams (28), see figure 5, and the support beams (28) are linear.

8. Claims 1-4,14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #5,634,528 to WATTS et al. WATTS et al. discloses a building construction including a support structure including a support beam (84), at least one enclosure cell (80,81), and at least one tension member (83). In reference to claims 2-4, there are 2-3 support beams in the form of column (84).

In reference to claim 14, WATTS et al. discloses the method of using tension support members including the steps of providing a support structure by installing a support beam (84), providing at least one enclosure cell (80,81), and suspending the enclosure cell (80,81) with a tension member (83) from the support beam (84). Regarding claim 15, the support members (84) are at least two columns (84).

Art Unit: 3635

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #3,791,081 to FELCIAI. FELCIAI discloses the basic claimed building construction, as detailed above, except for the material of the support beam. Although FELCIAI discloses the use of steel or concrete support beams, fiber reinforced plastic beams are well known in the art. Thus, it would have been an obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to select a known material on the basis of its suitability for the use intended.

Art Unit: 3635

*Allowable Subject Matter*

12. Claims 6,8,19 and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach the use of a building having suspended enclosures wherein the enclosures are suspended from annular support beams.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909.

YMH



Primary Examiner

September 30, 2002